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Amendment and/or Response
Reply to Office action of 16 April 2004

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REMARKS

Claims 2-12 and 14-20 are pending in this application.

The applicants respectfully request the admittance of this amendment, to place the claims in a better condition for allowance or appeal.

Claim 1 is canceled, and claims 9 and 10 are amended to be dependent upon claim 2. This amendment does not introduce new matter and does not require an additional search, because claim 2 has been determined to be allowable.

The Office action rejects claim 10 under 35 U.S.C. 112(b) for a lack of antecedent basis for "the delay means". The applicants thank the Examiner for this attention to detail. Claim 10 is amended herein to be dependent upon claim 2, which provides the proper antecedent basis.

The Office action rejects claim 9 under 35 U.S.C. 103(a) over Kamgar et al. (USP 6,205,167, hereinafter Kamgar) and Gilhousen et al. (USP 4,901,307, hereinafter Gilhousen). Claim 9 is amended herein to be dependent upon claim 2, which has been deemed allowable.

The Office action rejects:

claims 1, 11, and 13 under 35 U.S.C. 102(e) over Kamgar, and claim 12 under 35 U.S.C. 103(a) over Kamgar and Secord (USP 6,373,831, hereinafter Secord).

Claims 1 and 13 are cancelled herein. The applicants respectfully traverse these rejections with respect to claims 11 and 12.

Independent claim 11, upon which claim 12 depends, claims a communications system wherein messages are communicated from multiple transmitters, and each transmitted message has a transmitter code-phase that is independent of the code-phase of messages from the other transmitters.

The Office action cites Kamgar for this teaching. The applicants note that Kamgar teaches a base-station transmitter (FIG. 1) that transmits messages from multiple users,

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and a mobile receiver (FIG. 2) that is configured to decode a particular message from among the plurality of messages. In conventional IS-95 terminology, this communication is referred to as the "forward" channel, from base station to a mobile station. The applicants, on the other hand, teach a plurality of mobile transmitters that transmit messages to a common receiver (base-station) as the example/preferred embodiment of the applicants' invention. In conventional IS-95 terminology, this communication is referred to as the "reverse" channel.

The Examiner asserts that the applicants' claims can be interpreted to apply to Kamgar's forward channel teachings. The applicants thank the Examiner for this insight, and concur that the scope of the applicants' claims are not limited to reverse channel communications. However, the applicants respectfully note that Kamgar's transmitter code-phases are not independent of each other transmitter's code phase.

As stated by Kamgar, "Each transmitter within a CDMA network broadcasting over the same frequency spectrum and within the range of a particular receiver is distinguishable by its unique phase offset" (Kamgar, column 1, lines 33-36). A transmitter's code-phase cannot be said to be "unique" among other transmitters, and also said to be "independent" of the code-phase of the other transmitters. If transmitter A has code-phase A, for example, then transmitter B cannot also have code-phase A. Thus, the code-phase of B is dependent upon the code phase of A, as well as the code-phase of every other transmitter within its geographic area. For a code-phase to be unique among transmitters, the transmitters must all have a common time-base and each transmitter must be allocated a different phase than every other transmitter. As is known in the art, conventional IS-95 base stations maintain their unique code phase by synchronizing their transmitters with a time-base that is provided by the GPS satellite system, and each transmitter within a geographic zone is allocated a code-phase that is at least 64 "chips" away from the code-phase of every other transmitter (see, for example, USP 5,103,459, issued 7 April 1992 to Gilhousen et al.). Alternatively, the base stations within a common area could communicate directly with each other to assure that each transmitter's codephase is unique. Regardless of the scheme used, a transmitter's code-phase cannot be

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"unique", as taught by Kamgar, without being dependent upon the code-phases of each of the other transmitters.

Because Kamgar does not teach a communication system wherein multiple transmitters transmit messages using an identical spreading code and wherein each message has a code-phase that is independent of the code-phase of each other message, as specifically claimed by the applicants, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 11 and 12 over Kamgar.

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the rejections of record, allow all the pending claims, and find the present application to be in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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